## Finding on a Petition to List the Northern Long-Eared Bat as a Threatened Species; With an Interim 4(d) Rule

## Literature Cited

- Adams, R.A., and M.A. Hayes. 2008. Water availability and successful lactation by bats as related to climate change in arid regions of western North America. Journal of Animal Ecology, 77:1115-1121.
- Adams, R. A. 2010. Bat reproduction declines when conditions mimic climate change projections for western North America. Ecology, **91**(8):2437-2445.
- Alves, D.M.C.C., L.C. Terribile, and D. Brito. 2014. The Potential Impact of White-Nose Syndrome on the Conservation Status of North American Bats. PLoS ONE, **9**(9):1-7
- Amelon, S., and D. Burhans. 2006. Conservation assessment: *Myotis septentrionalis* (northern long-eared bat) in the eastern United States. Pages 69-82 *in* Conservation assessments for five forest bat species in the eastern United States, Thompson, F. R., III, editor. U.S. Department of Agriculture, Forest Service, North Central Research Station, General Technical Report NC-260. St. Paul, Minnesota. 82pp.
- American Wind Energy Association. 2013. Available at:

  <a href="http://www.awea.org/Resources/Content.aspx?ItemNumber=5059">http://www.awea.org/Resources/Content.aspx?ItemNumber=5059</a>. Accessed: 03/02/2015.
- American Wind Energy Association. 2015. Available at: http://www.awea.org/Issues/Content.aspx?ItemNumber=4437. Accessed: 03/02/2015.
- Arnett, E.B., W.K. Brown, W.P. Erickson, J.K. Fiedler, B.L. Hamilton, T.H. Henry, A. Jain, G.D. Johnson, J.K. Kerns, R.R. Koford, C.P. Nicholson, C.P. Nicholson, T.J. O'Connell, M.D. Piorkowski, and R.D. Tankersley Jr. 2008. Patterns of Bat Fatalities at Wind Energy Facilities in North America. Journal of Wildlife Management, **71**(1): 61-78.
- Arnett, E.B., and E.F. Baerwald. 2013. Impacts of wind energy development on bats: implications for conservation. Chapter 21: pp. 435-456 *in* Bat Evolution, Ecology, and Conservation, R. A. Adams and S. C. Pedersen, editors. Springer-Verlag New York, 547pp.

- Arnold, B.D. 2007. Population Structure and Sex-biased Dispersal in the Forest Dwelling Vespertilionid Bat, *Myotis Septentrionalis*. The American Midland Naturalist, **157**(2):374-384.
- Badgujar, P.C., S.K. Jain, A. Singh, J.S. Punia, R.P. Gupta, and G.A. Chandratre. 2013. Immunotoxic effects of imidacloprid following 28 days of oral exposure in BALB/c mice. Environmental Toxicology and Pharmacology, **35**(3):408-418.
- Baerwald, E.F, G.H. D'Amours, B.J. Klug, and R.M.R. Barclay. 2008. Barotrauma is a significant cause of bat fatalities at wind turbines. Current Biology, **18**(16):R695-R696.
- Bale, J.S., G.J. Masters, I.D. Hodkinson, C. Awmak, T.M. Bezemer, V.K. Brown, J.
  Butterfield, A. Buse, J.C. Coulson, J. Farrar, J.E. Good, R. Harrington, S. Hartley, T.
  Hefin Jones, R.L. Lindroth, M.C. Press, I. Symrnioudis, A.D. Watt, and J.B. Whittaker.
  2002. Herbivory in global climate change research: direct effects of rising temperature on insect herbivores. Global Change Biology, 8:1-16.
- Barbour, R.W., and W.H. Davis. 1969. Bats of America. The University of Kentucky Press, Lexington, Kentucky. 311pp.
- Barclay, R.M.R., and A. Kurta. 2007. Ecology and Behavior of Bats Roosting in Tree Cavities and Under Bark. Chapter 2: pp. 17-60 *in* Bats in Forests: Conservation and Management, M.J. Lacki, J.P. Hayes, and A. Kurta, editors. The Johns Hopkins University Press, Baltimore, Maryland, 352pp.
- Barnhart, P.R. 2014. Distribution and Habitat Use of North Dakota Bats. Dissertation. North Dakota State University, Fargo, North Dakota. 74 pp.
- Bayat, S., F. Geiser, P. Kristiansen, and S.C. Wilson. 2014. Organic contaminants in bats: Trends and new issues. Environment International, **63**:40–52.
- Beer, J.R. 1955. Survival and Movements of Banded Big Brown Bats. Journal of Mammalogy, **36**(2): 242-248.
- Benedict, R.A., H.H. Genoways, and P.W. Freeman. 2000. Shifting distributional patterns of mammals in Nebraska. Transactions of the Nebraska Academy of Sciences, **26**: 55-84.
- Benedict, R.A. 2004. Reproductive Activity and Distribution of Bats in Nebraska. Western North American Naturalist, **64**(2): 231-248.

- Bilecki L. C. 2003. Bat hibernacula in the karst landscape of central Manitoba: protecting critical wildlife habitat while managing for resource development. Master's Thesis. Winnipeg: University of Manitoba, 132pp.
- Blanton, J.D., D. Palmer, and C.E. Rupprecht. 2010. Rabies surveillance in the United States during 2009. Journal of the American Veterinary Medical Association, **237**(6):646-657.
- Blehert, D.S., A.C. Hicks, M. Behr, C.U. Meteyer, B.M. Berlowski-Zier, E.L. Buckles, J.T. H. Coleman, S.R. Darling, A. Gargas, R. Niver, J.C. Okoniewski, R.J. Rudd, and W.B. Stone. 2009. Bat White-Nose Syndrome: An Emerging Fungal Pathogen? Science, **323**: 227.
- Bohrman, J. and D. Fecske. 2013. White-Nose Syndrome Surveillance and Summer Monitoring of Bats at Great Swamp National Wildlife Refuge, Morris County, New Jersey. A final report prepared for United States Fish and Wildlife Service, 115pp.
- Bouma, H.R., H.V. Carey, and F.G.M. Kroese. 2010. Hibernation: the immune system at rest? Journal of Leukocyte Biology, **88**(4):619-624.
- Boyles, J.G., and D.P. Aubrey. 2006. Managing forests with prescribed fire: Implications for a cavity-dwelling bat species. Forest Ecology and Management, **222**:108-115.
- Boyles, J.G. and V. Brack Jr. 2009. Modeling Survival Rates of Hibernating Mammals with Individual-based Models of Energy Expenditure. Journal of Mammalogy, **90**(1):9-16.
- Boyles, J.G., and C.K.R. Willis. 2010. Could localized warm areas inside cold caves reduce mortality of hibernating bats affected by white-nose syndrome? Frontiers Ecology and the Environment, **8**(2):92-98.
- Brack Jr., V. and J.O. Whitaker. 2001. Foods of the northern myotis, *Myotis septentrionalis*, from Missouri and Indiana, with notes on foraging. Acta chiropterologica, **3**(2):203-210.
- Brack Jr., V., D.R. Keith, and S.A. Johnson. 2003. Advantages of infrared thermometers for recording temperatures in caves. Bat Research News, **44**(2):62-63.
- Brack Jr., V. 2007. Temperatures and Locations Used by Hibernating Bats, Including *Myotis sodalis* (Indiana Bat), in a Limestone Mine: Implications for Conservation and Management. Journal of Environmental Management, **40**:739-746.
- Brack, D. and V. Brack Jr. 2014. Endangered Bat Survey Along Transource Missouri's and Omaha Publice Power District's Sibley to Nebraska City Transmission Line Project in

- Missouri and Nebraska. Report Submitted to Service. Environmental Solutions & Innovations, Inc., 56pp.
- Bragg, T.B. and L.C. Hulbert. 1976. Woody Plant Invasion of Unburned Kansas Bluestem Prairie. Journal of Range Management, **29**(1):19-24.
- Briggs J.M., Knapp A.K., Brock B.L. 2002. Expansion of woody plants in tall-grass prairie: A 15-year study of fire and fire-grazing interactions. American Midland Naturalist, **147**:287–294.
- Broders, H.G. and G.J. Forbes. 2004. Interspecific and Intersexual Variation in Roost-site Selection of Northern Long-eared and Little Brown Bats in the Greater Fundy National Park Ecosystem. The Journal of Wildlife Management, **68**(3):602-610.
- Broders, H.G., G.J. Forbes, S. Woodley, and I.D. Thompson. 2006. Range Extent and Stand Selection for Roosting and Foraging in Forest-Dwelling Northern Long-Eared Bats and Little Brown Bats in the Greater Fundy Ecosystem, New Brunswick. The Journal of Wildlife Management, **70**(5):1174-1184.
- Broders, H.G., L.E. Burns, and S.C. McCarthy. 2013. First Records of the Northern Myotis (*Myotis Septentrionalis*) from Labrador and Summer Distribution Records and Biology of Little Brown Bats (*Myotis lucifugus*) in Southern Labrador. The Canadian Field-Naturalist, **127**:266-269.
- Brown, D.G., K.M. Johnson, T.R. Loveland, and D.M. Theobold. 2005. Rural Land-Use Trends in the Conterminous United States. Ecological Applications. **15**(6):1851-1863.
- Burek, K. 2001. Mycotic Diseases. Chapter 29: pp. 522-523 *in* Infectious Diseases of Wild Mammals, Third Edition, E.S. Wiliams and I.K. Barker, editors. Iowa State University Press, Ames, Iowa, 558pp.
- Burles, D. W., R. M. Brigham, R. A. Ring, T. E. Reimchen. 2009. Influence of weather on two insectivorous bats in a temperate Pacific Northwest rainforest. Canadian Journal of Zoology, **87**(2): 132-138.
- Burke, H. S. Jr. 1999. Maternity colony formation in *Myotis septentrionalis* using artificial roosts: the rocket box, a habitat enhancement for woodland bats? Bat Research News, **40**:77-78.
- Burnett, C.D. 1989. Bat Rabies in Illinois: 1965 to 1986. Journal of Wildlife Diseases, **25**(1):10-19.

- Caceres, M.C. and M.J. Pybus. 1997. Status of the northern long-eared bat (*Myotis septentrionalis*) in Alberta. Alberta Environmental Protection, Wildlife Management Division, Wildlife Status Report No. 3, Edmonton, AB, 19pp.
- Caceres, M.C. and R.M.R. Barclay. 2000. Myotis Septentrionalis. Mammalian Species, **634**:1-4.
- Caire, W., R.K. LaVal, M.L. LaVal, and R. Clawson. 1979. Notes on the ecology of *Myotis keenii* (Chiroptera, Vespertilionidae) in Eastern Missouri. American Midland Naturalist, **102**(2): 404-407.
- Carter, T.C., and G. Feldhamer. 2005. Roost tree use by maternity colonies of Indiana bats and northern long-eared bats in southern Illinois. Forest Ecology and Management, **219**:259-268.
- Carver, B.D. and A.E. Lereculeur. 2013. Predation on a Northern Long-Eared Myotis by a Gray Rat Snake. Southeastern Naturalist, **12**(4):N6-N8.
- Catton, T.J. 2014. Summary of the 2014 Minnesota Northern Long-eared Bat summer Habitat Use in Minnesota Project (preliminary report).
- Chenger, J.D., and J.D. Tyburec. 2014. Wapsi River bat survey. Report submitted to the U.S. Fish and Wildlife Service.
- Clark, B.K, J.B. Bowles, and B.S. Clark. 1987. Status of the endangered Indiana bat in Iowa. American Midland Naturalist, **118**(1):32-39.
- Clark, D.R., Jr. 1988. Environmental contaminants and the management of bat populations in the United States. p. 409-413 *in* Management of Amphibians, Reptiles and Small Mammals in North America: Proceedings of the Symposium, R.C. Szaro, K. S. Severson, and D. R. Patton, editors. USDA Forest Service General Technical Report RM-166, Flagstaff, Arizona. 458pp.
- Clark, B.K., and B.S. Clark. 1997. Mist-net Survey for Endangered and Candidate Bat Species on Public Lands in Eastern Oklahoma. Report submitted to the U.S. Fish and Wildlife Service. 16pp.
- Clark, D.R., Jr. and R. F. Shore. 2001. Chiroptera. p. 159-214 *in* Ecotoxicology of Wild Mammals, R.F. Shore and B. A. Rattner, editors. John Wiley and Sons, Ltd, West Sussex, England. 752pp.

- Committee on the Status of Species of Risk in Ontario (COSSARO). 2013. Candidate Species at Risk Evaluation for Northern Myotis (*Myotis septentrionalis*) [formerly Northern Longeared Bat]. Report to COSSARO, 18pp.
- Constantine, D.G. 1979. An Updated List of Rabies-Infected Bats in North America. Journal of Wildlife Diseases, **15**(20):347-349.
- Cope, J.B., and S.R. Humphrey. 1972. Reproduction of the bats *Myotis Keenii* and *Pipistrellus subflavus* in Indiana. Bat Research News, **13**:9-10.
- Committee on the Status of Endangered Wildlife in Canada (COSEWIC). 2012. Technical Summary and Supporting Information for an Emergency Assessment of the Northern Myotis *Myotis septentrionalis*. Committee on the Status of Endangered Wildlife in Canada, 24pp.
- Committee on the Status of Endangered Wildlife in Canada (COSEWIC). 2013. Assessment and status report on the Little Brown Myotis *Myotis lucifugus*, northern Myotis *Myotis septentrionalis* and Tri-colored Bat *Perimyotis subflavus* in Canada. Committee on the Status of Endangered Wildlife in Canada, 93pp.
- Courtin, F., W.B. Stone, G. Risatti, K. Gilbert and H.J. Van Kruiningen. 2010. Pathologic findings and liver elements in hibernating bats with white-nose syndrome. Veterinary Pathology, **47**(2):214-219.
- Crnkovic, A. 2003. Discovery of Northern Long-Eared Myotis, *Myotis septentrionalis* (Chiroptera: Vespertilionidae), in Louisiana. The Southwestern Naturalist, **48**(4):715-717.
- Cryan, P.M., M.A. Bogan, and G.M. Yanega. 2001. Roosting habits of four bat species in the Black Hills of South Dakota. Acta Chiropterologica, **3**(1):43-52.
- Cryan, P.M., and R.M.R. Barclay. 2009. Causes of bat fatalities at wind turbines: hypotheses and predictions. Journal of Mammalogy, **90**(6):1330-1340.
- Cryan, P.M., C.U. Meteyer, J.C. Boyles, and D.S. Blehert. 2010. Wing pathology of white-nose syndrome in bats suggests life-threatening disruption of physiology. BMC Biology, 8:135-142.
- Cryan P.M. 2011. Wind turbines as landscape impediments to the migratory connectivity of bats. Environmental Law, **41**:355-370.
- Cryan, P.M., C.U. Meteyer, D.S. Blehert, J.M. Lorch, D.M. Reeder, G.G. Turner, J. Webb, M.

- Behr, M. Verant, R.E. Russell, and K.T. Castle. 2013. Electrolyte depletion in whitenose syndrome bats. Journal of Wildlife Diseases, **49**(2):398-402.
- Davis, W.H., and H.B. Hitchcock. 1965. Biology and Migration of the Bat, *Myotis lucifugus*, in New England. Journal of Mammalogy, **46**(2):296-313.
- Davis, M.A. 2014. Assessing Illinois bat populations in the age of white nose syndrome. Report by the Illinois Natural History Survey, Prairie Research Institute.
- Department of the Air Force. 2007. Survey for the federally endangered Indiana bat (*Myotis sodalis*) at Scott Air Force Base in St. Clair County, Illinois. Prepared for US Air Force Center for Engineering and the Environment.
- Department of the Air Force. 2010. Final endangered species management plan for the federally endangered Indiana bat (*Myotis sodalis*) at Scott Air Force Base in St. Clair County, Illinois. Prepared for US Air Force Center for Engineering and the Environment.
- Dickinson, M.B., M.J. Lacki, and D.R. Cox. 2009. Fire and the endangered Indiana bat. Proceedings of the 3rd Fire in Eastern Oak Forests Conference GTR-NRS-P-46, p. 51-75.
- Dickinson, M.B., J.C. Norris, A.S. Bova, R.L. Kremens, V. Young, and M.J. Lacki. 2010. Effects of wildland fire smoke on a tree-roosting bat: integrating a plume model, field measurements, and mammalian dose–response relationships. Canadian Journal of Forest Research, **40**:2187-2203.
- Dodd, L.E., E.G. Chapman, J.D. Harwood, M.J. Lacki, and L.K. Rieske. 2012. Identification of pretty of *Myotis septentrionalis* using DNA-based techniques. Journal of Mammalogy, **93**(4):1119-1128.
- Duzguner, V., and S. Erdogan. 2012. Chronic exposure to imidacloprid induces inflammation and oxidative stress in the liver and central nervous system of rats. Pesticide Biochemistry and Physiology, **104**(1):58-64.
- Dzal, Y., L.P. McGuire, N. Veselka, and M.B. Fenton. 2011. Going, going, gone: the impact of white-nose syndrome on the summer activity of the little brown bat (*Myotis lucifugus*). Biology Letters, **7**:392-394.
- Easterla, D.A. 1968. Parturition of Keen's Myotis in Southwestern Missouri. Journal of Mammalogy, **49**(4):770.

- Ehlman, S.M., J.J. Cox, and P.H.Crowley. 2013. Evaporative water loss, spatial distributions, and survival in white-nose-syndrome-affected little brown myotis: a model. Journal of Mammalogy, **94**(3):572-583.
- Eidels, R. R., J. O. Whitaker, Jr. and D. W. Sparks. 2007. Insecticide residues in bats and guano from Indiana. Proceedings of the Indiana Academy of Science, **116**(1):50-57.
- Ellison, L.E., 2008, Summary and Analysis of the U.S. Government Bat Banding Program: U.S. Geological Survey Open-File Report 2008-1363, 117 p.
- Environment Yukon. 2011. Yukon Bats. Government of Yukon, Environment Yukon, Whitehorse, Yukon. 22pp.
- Environmental Solutions & Innovations, Inc. 2014. Endangered bat survey along Transource Missouri's and Omaha Public Power District's Sibley to Nebraska City Transmission Line Project in Missouri and Nebraska. Report submitted to the U.S. Fish and Wildlife Service.
- Escobar, L.E., A. Lira-Noriega, G. Medina-Vogel, and A.T. Peterson. 2014. Potential for spread of the white-nose fungus (*Pseudogymnoascus destructans*) in the Americas: use of Maxent and NicheA to assure strict model transference. Geospatial Health, **9**(1):221-229.
- Faure, P.A., J.H. Fullard, J.W. Dawson. 1993. The gleaning attacks of the Northern long-eared bat, *Myotis septentrionalis*, are relatively inaudible to moths. Journal of Experimental Biology, **178**:173-189.
- Feldhamer, G.A., T.C. Carter, and J.O. Whitaker Jr. 2009. Prey Consumed by Eight Species of Insectivorous Bats from Southern Illinois. The American Midland Naturalist, **162**(1):43-51.
- Fenton, M.B.1969. Summer activity of *Myotis lucifugus* (Chiroptera: Vespertilionidae) at hibernacula in Ontario and Quebec. Canadian Journal of Zoology, **47**(4)597-602.
- Fitch, J.H., and K.A. Shump, Jr. 1979. Myotis keenii. Mammalian Species, 121:1-3.
- Ford, W.M., S.F. Owen, J.W. Edwards, and J.L. Rodrigue. 2006. *Robinia pseudoacacia* (Black Locust) as Day-roosts of Male *Myotis septentrionalis* (Northern Bats) on the Fernow Experimental Forest, West Virginia. Northeastern Naturalist, **13**(1):15-24.
- Ford, W.M., E.R. Britzke, C.A. Dobony, J.L. Rodrigue, and J.B. Johnson. 2011. Patterns of

- acoustical activity of bats prior to and following white-nose syndrome occurrence. Journal of Fish and Wildlife Management, **2**(2):125-134.
- Foster, R.W., and A. Kurta. 1999. Roosting ecology of the Northern bat (*Myotis septentrionalis*) and comparisons with the endangered Indiana bat (*Myotis sodalis*). Journal of Mammalogy, **80**(2):659-672.
- Francl, K.E., W.M. Ford, D.W. Sparks, and V. Brack. 2012. Capture and reproductive trends in summer bat communities in West Virginia: Assessing the impact of white-nose syndrome. Journal of Fish and Wildlife Management, **3**(1):33-42.
- Frick, W.F., J.F. Pollock, A.C. Hicks, K.E. Langwig, D.S. Reynolds, G.G. Turner, C.M. Butchkoski, and T. H. Kunz. 2010a. An emerging disease causes regional population collapse of a common North American bat species. Science, **329**:679-682.
- Frick, W. F., D. S. Reynolds and T. H. Kunz. 2010b. Influence of climate and reproductive timing on demography of little brown myotis *Myotis lucifugus*. Journal of Animal Ecology, **79**:128–136.
- Frick, W.F., S.J. Puechmaille, J.R. Hoyt, B.A. Nickel, K.E. Langwig, J.T. Foster, K.E. Barlow, T. Bartonicka, D. Feller, A.J. Haarsma, C. Herzog, I. Horacek, J. van der Kooij, B. Mulkens, B. Petrov, R. Reynolds, L. Rodrigues, C.W. Stihler, G.G. Turner, and A.M. Kilpatrick. 2015. Disease alters macroecological patterns of North American bats. Global Ecology and Biogeography, Published online:1-9.
- Frumhoff, P.C., J.J. McCarthy, J.M. Melillo, S.C. Moser, and D.J. Wuebbles. 2007. Confronting Climate Change in the U.S. Northeast: Science, Impacts, and Solutions. Synthesis report of the Northeast Climate Impacts Assessment (NECIA). Cambridge, MA: Union of Concerned Scientists (UCS). 160 pp.
- Gargas, A., M.T. Trest, M. Christensen, T.J. Volk, and D.S. Blehert. 2009. *Geomyces destructans* sp. nov. associated with bat white-nose syndrome. Mycotaxon, **108**:147–154.
- Garroway, C.J., and H.G. Broders. 2007. Nonrandom association patterns at northern long-eared bat maternity roosts. Canadian Journal of Zoology, **85**:956-964.
- Garroway, C.J., and H.G. Broders. 2008. Day roost characteristics of northern long-eared bats (*Myotis septentrionalis*) in relation to female reproductive status. Ecoscience, **15**(1):89-93.
- Gates, J.E., Feldhamer, G.A., Griffith, L.A., and R.L. Raesly. 1984. Status of cave-dwelling

- bats in Maryland: importance of marginal habitats. Wildlife Society Bulletin, **12**:162-169.
- Geluso K., C.A. Lemen, and P. Freeman. 2014. Current Status of the Northern Myotis (*Myotis septentrionalis*) in Northwestern Nebraska. Final Report, 13pp.
- Gillam, P.R., and E. Barnhart. 2011. Distribution and Roosting Ecology of North Dakota Bats. Presentation at the 41st Annual Symposium of the North American Society for Bat Research, Toronto, Ontario, 58pp.
- Glover, A.M. and J.D. Altringham. 2008. Cave selection and use by swarming bat species. Biological Conservation. **141**:1493-1504.
- Goehring, H.H. 1954. *Pipistrellus subflavus obscurus, Myotis keenii*, and *Eptesicus fuscus fuscus* hibernating in a storm sewer in central Minnesota. Journal of Mammalogy, **35**(3):434-436.
- Grandmaison, D.D., K. Kirschbaum, and T. Catton. 2013. Superior National Forest Bat Monitoring: Summary of 2013 Survey Effort.
- Grassland Heritage Foundation. Restore and Maintain Prairie. Available at: <a href="http://www.grasslandheritage.org/prairie\_maintain.php">http://www.grasslandheritage.org/prairie\_maintain.php</a>. Accessed: 12/23/2014.
- Griffin, D.R. 1940a. Reviewed notes on the life histories of New England cave bats. Journal of Mammalogy, **21**(2):181-187.
- Griffin, D.R. 1940b. Migrations of New England bats. Bulletin of the Museum of Comparative Zoology, **86**(6):215-246.
- Griffin, D.R. 1945. Travels of banded cave bats. Journal of Mammalogy, 26(1):15-23.
- Griffith, L.A., and J.E. Gates. 1985. Food habits of cave-dwelling bats in the central Appalachians. Journal of Mammalogy, **66**(3):451-460
- Grodsky, S.M., M.J. Behr, A. Gendler, D. Drake, B.D. Dieterle, R.J. Rudd, and N.L. Walrath. 2011. Investigating the causes of death for wind turbine-associated bat fatalities. Journal of Mammalogy, **92**(5):917-925.
- Hall, J.S., R.J. Cloutier, and D.R. Griffin. 1957. Longevity Records and Notes on Tooth Wear of Bats. Journal of Mammalogy, **38**(3):407-409.
- Hall, J.S. and F.J. Brenner. 1968. Summer netting of bats at a cave in Pennsylvania. Journal of

- Mammalogy, **49**(4):779-781.
- Hallam, T., J. Nichols, W. Waldrep Jr., P. Federico, C. Butchkoski, G. Turner, D. Culver, R.Nichols, and G. McCracken. 2012. Unpublished document. Supplementary Materials #3.The Spread of White-nose Syndrome, an Emerging Disease of Bats.
- Hallam, T.G., and G.F. McCracken. 2011. Management of the Panzootic White-Nose Syndrome through Culling of Bats. Conservation Biology, **25**(1):189-194.
- Harvey, M.J., J.R. MacGregor, R.R. Currie. 1991. Distribution and Status of Chiroptera in Kentucky and Tennessee. Journal of Tennessee Academy of Science, **66**(4):191-193.
- Harvey, M.J. 1992. Bats of the eastern United States. Arkansas Game & Fish Commission, 46pp.
- Harvey, M.J., J.S. Altenbach, and T.L. Best. 1999. Bats of the United States. Arkansas Game and Fish Commission. 64pp.
- Hayes, M.A. 2013. Bats killed in large numbers at United States wind energy facilities. Bioscience, **63**:975-979.
- Heath, D.R., D.A. Saugey, and G.A. Heidt. 1986. Abandoned Mine Fauna of the Ouachita Mountains, Arkansas: Vertebrate Taxa. Arkansas Academy of Science, **40**:33-36.
- Hein, C.D. 2012. Potential impacts of shale gas development on bat populations in the northeastern United States. An unpublished report submitted to the Delaware Riverkeeper Network, Bristol, Pennsylvania by Bat Conservation International, Austin, Texas, 33pp.
- Henderson, L.E., and H.G. Broders. 2008. Movements and resource selection of the northern long-eared myotis (*Myotis septentrionalis*) in a forest-agriculture landscape. Journal of Mammalogy, **89**(4):952-963.
- Henderson, L.E., L.J. Farrow, and H.G. Broders. 2008. Intra-specific effects of forest loss on the distribution of the forest-dependent northern long-eared bat (*Myotis septentrionalis*). Biological Conservation, **141**:1819-1828.
- Hitchcock, H.B. 1949. Hibernation of bats in southeastern Ontario and adjacent Quebec. Canadian Field-Naturalist, **63**(2):47-59.
- Hitchcock, H.B. 1965. Twenty-three years of bat banding in Ontario and Quebec. Canadian Field-Naturalist, **79**:4-14.
- Hoff, G.L., and W.J. Bigler. 1981. The role of bats in the propagation and spread of

- histoplasmosis: A review. Journal of Wildlife Diseases, 17(2):191-196.
- Hoyt, J.R., K.E. Langwig, J. Okoniewski, W.F. Frick, W.B. Stone, and A.M. Kilpatrick. 2014. Long-Term Persistence of *Pseudogymnoascus destructans*, the Causative Agent of White-Nose Syndrome, in the Absence of Bats. EcoHealth, Published online:1-4.
- Huso, M.M.P, and D. Dalthorp. 2014. A comment on "Bats Killed in Larger Numbers and United States Wind Energy Facilities." Bioscience, **64**:546-547.
- Ihlo, C. M. 2013. Predicting the spread of white-nose syndrome in bats: a strategy for prioritizing resources. Master's Thesis. Winnipeg: University of Manitoba, 132pp.
- Ingersoll, T.E., B.J. Sewall, and S.K. Amelon. 2013. Improved Analysis of Long-Term Monitoring Data Demonstrates Marked Regional Declines of Bat Populations in the Eastern United States. PLoS ONE, **8**(6):1-12.
- Intergovernmental Panel on Climate Change (IPCC) 2013: Annex III: Glossary [Planton, S. (ed.)]. pp. 1147-1465 In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Available at: <a href="https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5\_AnnexIII\_FINAL.pdf">https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5\_AnnexIII\_FINAL.pdf</a> Accessed: 03/02/2015.
- Intergovernmental Panel on Climate Change (IPCC) 2014: *Climate Change 2014 Synthesis Report*. [Pachauri, R.K. *et al.*] 151 pp. Available at: <a href="http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR\_AR5\_FINAL\_full.pdf">http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR\_AR5\_FINAL\_full.pdf</a> Accessed: 03/02/2015.
- Jackson, J.L. 2004. Effects of Wildlife Stand Improvements and Prescribed Burning on Bat and Insect on Bat and Insect Communities: Buffalo Ranger District, Ozark-St. Francis National Forest, Arkansas. Master's Thesis. Arkansas State University, Jonesboro, Arkansas, 152pp.
- Johnson, G.D. 2005. A review of bat mortality at wind-energy developments in the United States. Bat Research News, **46**(2):45-49.
- Johnson, J.B, J.W. Edwards, W.M. Ford, and J.E. Gates. 2009a. Roost tree selection by northern myotis (*Myotis septentrionalis*) maternity colonies following prescribed fire in a Central Appalachian Mountains hardwood forest. Forest Ecology and Management, **258:**233–242.

- Johnson, J.B., W.M. Ford, J.L. Rodrigue, J.W. Edwards, and C.M. Johnson. 2010. Roost selection by male Indiana myotis following forest fires in central Appalachian hardwoods forests. Journal of Fish and Wildlife Management, 1(2):111-121.
- Johnson, J.B., W.M. Ford, and J.W. Edwards. 2012. Roost networks of northern myotis (*Myotis septentrionalis*) in a managed landscape. Forest Ecology and Management, **266**:223-231.
- Johnson, J.B., J.H. Roberts, T.L. King, J.W. Edwards, W.M. Ford, and D.A. Ray. 2014a. Genetic structuring of northern myotis (*Myotis septentrionalis*) at multiple spatial scales. Acta Theriologica, **59**(2):223-231. (Cited as Johnson et al. 2014, unpaginated in the **Background** section)
- Johnson, J.S., J. Kiser, K.S. Watrous, and T.S. Peterson. 2011. Day-Roosts of *Myotis leibii* in the Appalachian Ridge and Valley of West Virginia. Northeastern Naturalist, **18**(1):95-106.
- Johnson, J.S., D.M. Reeder, J.W. McMichael III, M.B. Meierhofer, D.W.F. Stern, S.S. Lumadue, L.E. Sigler, H.D. Winters, M.E. Vodzak, A. Kurta, J.A., Kath, and K.A. Field. 2014b. Host, Pathogen, and Environmental Charecteristics Predict White-Nose Syndrome Mortality in Captive Little Brown Myotis (*Myotis lucifugus*). PLoSONE, **9**(11):1-9. (Cited as Johnson et al. 2014, unpaginated in the *Factor C. Disease or Predation*, Disease, I. White-nose Syndrome section)
- Johnson, N. 2010. Pennsylvania energy impacts assessment. Report 1: Marcellus shale natural gas and wind. The Nature Conservancy, Pennsylvania Chapter, 46pp.
- Johnson, S.A., V. Brack, Jr., and R.E. Rolley. 1998. Overwinter weight loss of Indiana bats (Myotis sodalis) from hibernacula subject to human visitation. The American Midland Naturalist, **139**(2):255-261.
- Jonasson, K.A. and C.K. Willis. 2011. Changes in Body Condition of Hibernating Bats Support the Thrifty Female Hypothesis and Predict Consequences for Populations with White-Nose Syndrome. PLoS ONE, **6**(6):1-8.
- Jones, G., D.S. Jacobs, T.H. Kunz, M.R. Willig, P.A. Racey. 2009. Carpe noctem: the importance of bats as bioindicators. Endangered Species Research, 8:93-115.
- Jung, T.S., I.D. Thompson, and R.D. Titman. 2004. Roost site selection by forest-dwelling male Myotis in central Ontario, Canada. Forest Ecology and Management, **202**:325-335.
- Kannan, K. S. H. Yun, R. J. Rudd, M. Behr. 2010. High concentrations of persistent organic

- pollutants including PCBs, DDT, PBDEs and PFOS in little brown bats with white-nose syndrome in New York, USA. Chemosphere, **80**:613–618.
- Kiesow, A.M., and J.A. Kiesow. 2010. Bat Survey Along The Missouri River In Central South Dakota. The Prairie Naturalist, **42**(1/2):65-66.
- Kimura-Kuroda J., M. Hayashi, and H. Kawano. 2011. Nicotine-like effects of neonicotinoids on rat cerebellar neurons. Neuroscience Research, 71, suppl.
- King, Andy. 1993. A Model of Summer Habitat Use by the Federally Endangered Indiana Bat (*Myotis sodalis*) in Indiana: Compilation of Data from 1990 1992 Field Studies. A report to Indiana Department of Natural Resources. 22pp.
- Krochmal, A.R., and D.W. Sparks. 2007. Timing of Birth and Estimation of Age of Juvenile *Myotis septentrionalis* and *Myotis lucifugus* in West-Central Indiana. Journal of Mammalogy, **88**(3):649-656.
- Kunz, T.H. 1971. Reproduction of Some Vespertilionid Bats in Central Iowa. American Midland Naturalist, **86**(2):477-486.
- Kunz, T.H. 1973. Temporal and Spatial Components of Bat Activity in Central Iowa. Journal of Mammalogy, **54**(1):14-32.
- Kunz, T.H., E.L.P. Anthony, and W.T. Rumage. 1977. Mortality of little brown bats following multiple pesticide applications. Journal of Wildlife Management, **41**(3):476-483.
- Kunz, T.H., and J.D. Reichard. 2010. Status review of the little brown myotis (*Myotis lucifugus*) and determination that immediate listing under the endangered species act is scientifically and legally warranted. Boston University's Center for Ecology and Conservation Biology, Boston, Massachusetts. 30pp.
- Kurta, A. 1982. A review of Michigan Bats: Seasonal and Geographic Distribution. Michigan Academician, **14**:295-311.
- Kurta, A. 1995. Bats (Order Chiroptera). pp. 60-90 *in* Mammals of the Great Lakes Region. The University of Michigan Press, Ann Arbor, Michigan, 212pp.
- Kurta, A., J. Caryl, and T. Tipps. 1997. Bats and Tippy Dam: species composition, seasonal use, and environmental parameters. Michigan Academician, **29**(4):473-490.
- Kurta, A., S.W. Murray, and D.H. Miller. 2002. Roost Selection and Movements Across the Summer Landscape. p. 118-129 *in* The Indiana bat: biology and management of an

- endangered species, A. Kurta and J. Kennedy, editors. Bat Conservation International, Inc., Austin, Texas, 253pp.
- Lacki, M.J., and J.T. Hutchinson. 1999. Communities of bats (Chiroptera) in the Grayson Lake Region, northeastern Kentucky. Journal of the Kentucky Academy of Science, **60**:9-15.
- Lacki, M.J., and J.H. Schwierjohann. 2001. Day-Roost Characteristics of Northern Bats in Mixed Mesophytic Forest. The Journal of Wildlife Management, **65**(3):482-488
- Lacki, M.J., D.R. Cox, L.E. Dodd, and M.B. Dickinson. 2009. Response of northern bats (*Myotis septentrionalis*) to prescribed fires in eastern Kentucky forests. Journal of Mammalogy, **90**(5):1165-1175
- Langwig, K.E., W.F. Frick, J.T. Bried, A.C. Hicks, T.H. Kunz, and A.M. Kilpatrick. 2012. Sociality, density-dependence and microclimates determine the persistence of populations suffering from a novel fungal disease, white-nose syndrome. Ecology Letters, **15**:1050-1057.
- Langwig, K.E., W.F. Frick, R. Reynolds, K.L. Parise, K.P. Drees, J.R. Hoyt, T.L. Cheng, T.H. Kunz, J.T. Foster, and M. Kilpatrick. 2015. Host and pathogen ecology drive the seasonal dynamics of a fungal disease, white-nose syndrome. Proceedings of the Royal Society B, Published online:1-7.
- Lereculeur, A. 2013. Summer Roosting Ecology of the Northern Long-Eared Bat (*Myotis septentrionalis*) at Catoosa Wildlife Management Area. Master's Thesis. Tennessee Technological University, Cookeville, Tennessee, 65pp.
- LaVal, R.K., R.L. Clawson, M.L. LaVal and W. Caire. 1977. Foraging Behavior and Nocturnal Activity Patterns of Missouri Bats, with Emphasis on the endangered species *Myotis grisescens* and *Myotis sodalis*. Journal of Mammalogy, **58**(4):592-599
- Loeb, S.C. and J.M. O'Keefe. 2006. Habitat Use by Forest Bats in South Carolina in Relation to Local, Stand, and Landscape Characteristics. Journal of Wildlife Management, **70**(5):1215-1217.
- Loeb, S.C. and J.M. O'Keefe. 2011. Bats and Gaps: The Role of Early Successional Patches in the Roosting and Foraging Ecology of Bats. Chapter 10 pp. 167-189 *in* Sustaining Young Forest Communities, C. Greenberg, B. Collins, and F. Thompson III, editors. Springer-Verlag New York, 304pp.
- Loeb, S. C. and E. A. Winters. 2013. Indiana bat summer maternity distribution: effects of current and future climates. Ecology and Evolution, **3**(1):103–114.

- Lorch, J.M., C.U. Meteyer, M.J. Behr, J.G. Boyles, P.M. Cryan, A.C. Hicks, A.E. Ballmann, J.T.H. Coleman, D.N. Redell, D.M. Reeder, and D.S. Blehert. 2011. Experimental infection of bats with *Geomyces destructans* causes white-nose syndrome. Nature, **480**:376-379.
- Lorch, J.M., D.L., Lindner, A. Gargas, L.K. Muller, A.M. Minnis, and D.S Blehert. 2013. A culture based survey of fungi in soil from bat hibernacula in the eastern United States and its implications for detection of Geomyces destructans, the causal agent of bat white-nose syndrome. Mycologia, **105**(2):237-252.
- Lorch, J.M., A.M. Minnis, C.U. Meteyer, J.A. Redell, J.P. White, H.M. Kaarakka, L.K. Muller, D.L. Lindner, M.L. Verant, V. Shearn-Bochsler, and D.S. Blehert. 2014. The Fungus *Trichophyton redellii* sp. nov. Causes Skin Infections that Resemble White-Nose Syndrome of Hibernating Bats. Journal of Wildlife Diseases, **51**(1):36-47.
- Loss, S., T. Will, and P. Marra. 2013. Estimates of bird collision mortality at wind facilities in the contiguous United States. Biological Conservation, **168**:201-209.
- Lowe, A.J. 2012. Swarming Behaviour and Fall Roost-Use of Little Brown (*Myotis lucifugus*), and Northern Long-Eared Bats (*Myotis septentrionalis*) in Nova Scotia, Canada. Master's Thesis. St. Mary's University, Halifax, Nova Scotia, Canada. 88pp.
- Lucan, R. K., M. Weiser and V. Hanak. 2013. Contrasting effects of climate change on the timing of reproduction and reproductive success of a temperate insectivorous bat. Journal of Zoology, **290**:151–159.
- Lyman, C.P., J.S. Willis, A. Malan, and L.C.H. Wang. 1982. Hibernation and torpor in mammals and birds. Academic Press, New York, New York, 317 pp.
- Maher, S.P., A.M. Kramer, J.T. Pulliam, M.A. Zokan, S.E. Bowden, H.D. Barton, K. Magori, and J.M. Drake. 2012. Spread of white-nose syndrome on a network regulated by geography and climate. Nature Communications, **3**:1-8.
- Main, A.J. 1979. Virologic and Serologic Survey for Eastern Equine Encephalomyelitis and Certain other Viruses in Colonial Bats of New England. Journal of Wildlife Disease, **15**(3):455-466.
- Mattson, T., S. Simon, and K.L. Murray. 2014. Northern Long-eared Bat Presence/Absence Surveys Grande Prairie Wind Farm. June 11–21, 2014. Prepared for Grande Prairie Wind, LLC, Edina, Minnesota. Prepared by Western EcoSystems Technology, Inc. (WEST), Minneapolis, Minnesota.

- Melillo J. M., T.C. Richmond, and G. W. Yohe, Eds. 2014. Climate Change Impacts in the United States: The Third National Climate Assessment. U.S. Global Change Research Program, 19-67. Available at: <a href="http://nca2014.globalchange.gov/downloads">http://nca2014.globalchange.gov/downloads</a> Accessed: 03/02/3015.
- Menzel, M.A., S.F. Owen, W.M. Ford, J.W. Edwards, P.B. Wood, B.R. Chapman, and K.V. Miller. 2002. Roost tree selection by northern long-eared bat (*Myotis septentrionalis*) maternity colonies in an industrial forest of the central Appalachian mountains. Forest Ecology and Management, **155**:107-114.
- Messenger, S.L., J.S. Smith, and C.E. Rupprecht. 2002. Emerging epidemiology of batassociated cryptic cases of rabies in humans in the United States. Clinical Infectious Diseases, **35**: 738-747.
- Messenger, S.L., C.E. Rupprecht, and J.S. Smith. 2003. Bats, emerging virus infections, and the rabies paradigm. Chapter 14: pp. 622-679 *in* Bat Ecology, T. Kunz and M. B. Fenton, editors. The University of Chicago Press, Chicago, Illinois, 779pp.
- Meteyer, C.U., D. Barber, and J.N. Mandl. 2012. Pathology in euthermic bats with white nose syndrome suggests a natural manifestation of immune reconstitution inflammatory syndrome. Virulence, **3**(7):583-585.
- Meteyer, C.U., E.L. Buckles, D.S. Blehert, A.C. Hicks, D.E. Green, V. Shearn-Bochsler, N.J. Thomas, A. Gargas, and M.J. Behr. 2009. Histopathologic criteria to confirm white-nose syndrome in bats. Journal of Veterinary Diagnostic Investigation, **21**:411-414.
- Miles, P.D. 2014. Forest Inventory EVALIDator web-application version 1.6.0.01. St. Paul, MN: U.S. Department of Agriculture, Forest Service, Northern Research Station, Available at: <a href="http://apps.fs.fed.us/Evalidator/evalidator.jsp">http://apps.fs.fed.us/Evalidator/evalidator.jsp</a> Accessed: 03/02/2015.
- Miller-Butterworth, C.M., M.J. Vonhof, J. Rosenstren, G.G. Turner and A.L. Russell. 2014. Genetic Structure of Little Brown Bats (*Myotis lucifugus*) Corresponds with Spread of White-Nose Syndrome among Hibernacula. Journal of Heredity, **105**(3):354-364.
- Mills, R.S. 1971. A concentration of *Myotis keenii* at caves in Ohio. Journal of Mammalogy, **52**(3):625.
- Missouri Army National Guard. 2014. Final Biological Assessment: Timber Harvest Project Camp Crowder Training Area.

- Moore, M.S., J.D. Reichard, T.D. Murtha, B. Zahedi, R.M. Fallier, and T.H. Kunz. 2011. Specific alterations in complement protein activity of little brown myotis (*Myotis lucifugus*) hibernating in white-nose syndrome affected sites. PLoS ONE, **6**(11):1-11.
- Moore, M.S., J.D. Reichard, T.D. Murtha, M.L. Nabhan, R.E. Pian, J.S. Ferreira, and T.H. Kunz. 2013. Hibernating Little Brown Myotis (*Myotis lucifugus*) Show Variable Immunological Responses to White-Nose Syndrome. PLoS ONE, **8**(3):1-9.
- Moosman, P.R., J.P. Veilleux, G.W. Pelton, and H.H. Thomas. 2013. Changes in capture rates in a community of bats in New Hampshire during the progression of white-nose syndrome. Northeastern Naturalist, **20**(4): 552-558.
- Morris A.D., M.J. Vonhof, D.A. Miller, M.C. Kalcounis-Rueppell. 2009. *Myotis septentrionalis* Trouessart (Northern long-eared bat) records from the Coastal Plain of North Carolina. Southeastern Naturalist, **8**(2):355-362.
- Muller, L.K., J.M. Lorch, D.L. Lindner, M. O'Connor, A. Gargas, and D.S. Blehert. 2013. Bat white-nose syndrome: a real-time TaqMan polymerase chain reaction test targeting the intergenic spacer region of *Geomyces destructans*. Mycologia, **105**(3):253-259.
- Mumford R.E., and J.B. Cope. 1964. Distribution and status of the chiroptera of Indiana. American Midland Naturalist, **72**(2):473-489.
- Nagorsen, D.W. and R.M. Brigham. 1993. Bats of British Columbia.

  Royal British Columbia Museum, Victoria, and the University of British Columbia Press,
  Vancouver. 164 pp.
- National Park Service (NPS) 2013. White-Nose Syndrome. Available at: http://www.nature.nps.gov/biology/WNS. Accessed: 03/02/2015.
- Neubaum, D.J., T.J. O'Shea, and K.R. Wilson. 2006. Autumn migration and selection of rock crevices as hibernacula by big brown bats in Colorado. Journal of Mammalogy, **87**(3):470-479.
- Norris, J.L. 2014. A 2014 winter census of bats of the Lewisburg Limestone Mine, Preble County, Ohio. Report prepared for the Ohio Division of Wildlife.
- Norquay, K. J. O., F. Martinez-Nuñez, J. E. Dubois, K. M. Monson, and C. K. R. Willis. 2013. Long-distance movements of little brown bats (*Myotis lucifugus*). Journal of Mammalogy, **94**:506-515.
- Olson, C.R., D.P. Hobson, and M.J. Pybus. 2011. Changes in population size of bats at a

- hibernaculum in Alberta, Canada, in relation to cave disturbance and access restrictions. Northwestern Naturalist, **92**(3):224-230.
- Owen, S.F., M.A. Menzel, W.M. Ford, B.R. Chapman, K.V. Miller, J.W. Edwards, and P.B. Wood. 2003. Home-range size and habitat used by the Northern Myotis (*Myotis septentrionalis*). American Midland Naturalist, **150**(2):352-359.
- Owen, S.F., M.A. Menzel, W.M. Ford, J.W. Edwards, B.R. Chapman, K.V. Miller, and P.B. Wood. 2002. Roost tree selection by maternal colonies of Northern long-eared Myotis in an intensively managed forest. USDA Forest Service. Newtown Square, Pennsylvania. 10 pp.
- Parsons, S., K.L. Lewis, and J.M. Psyllakis. 2003. Relationships between roosting habitat of bats and decay of aspen in the sub-boreal forests of British Columbia. Forest Ecology and Management, **177**:559-570.
- Patriquin, K.J. and R.M. Barclay. 2003. Foraging by bats in cleared, thinned and unharvested boreal forest. Journal of Applied Ecology, **40**:646-657.
- Patriquin, K.J., M.L. Leonard, H.G. Broders, and C.J. Garroway. 2010. Do social networks of female northern long-eared bats vary with reproductive period and age? Behavioral Ecology and Sociobiology, **84**:899-913.
- Patriquin, K.J., F. Palstra, M.L. Leonard, and H.G. Broders. 2013. Female northern myotis (*Myotis septentrionalis*) that roost together are related. Behavioral Ecology, **24**(4):949-954.
- Pearson, E.W. 1962. Bats hibernating in silica mines in southern Illinois. Journal of Mammalogy, **43**(1):27-33.
- Perry, R.W., and R.E. Thill. 2007. Roost selection by male and female northern long-eared bats in a pine-dominated landscape. Forest Ecology and Management **247**:220-226.
- Perry, R.W. 2011. Fidelity of Bats to Forest Sites Revealed From Mist-Netting Recaptures. Journal of Fish and Wildlife Management, **2**(1):112-116.
- Perry, R.W. 2012. A review of fire effects on bats and bat habitat in the eastern oak region. USDA Forest Service. Proceedings of the 4th Fire in Eastern Oak Forests Conference, 170-191.
- Pikula, J., H. Bandouchova, L. Novotny, C.U. Meteyer, J. Zukal, N.R. Irwin, J. Zima, and N.

- Martinkova. 2012. Histopathology confirms white-nose syndrome in bats in Europe. Journal of Wildlife Diseases, **48**(1):207–211.
- Polar Bear Memorandum. 2010. Supplemental Explanation for the Legal Basis of the Department's May 15, 2008, Determination of Threatened Status for Polar Bears. U.S Fish and Wildlife Service Memorandum, FWS/AES/047069, 18pp.
- Puechmaille, S.J., G. Wibbelt, V. Korn, H. Fuller, F. Forget, K. Muhldorfer, A. Kurth, W.
  Bogdanowicz, C. Borel, T. Bosch, T. Cherezy, M. Drebet, T. Gorfol, A. Haarsma, F.
  Herhaus, G. Hallart, M. Hammer, C. Jungmann, Y.L. Bris, L. Lutsar, M. Masing, M.
  Mulkens, K. Passior, M. Starrach, A. Wojtaszewski, U. Zophel, and E.C. Teeling. 2011.
  Pan-European Distribution of White-Nose Syndrome Fungus (*Geomyces destructans*)
  Not Associated with Mass Mortality. PLoS ONE, 6(4):1-11.
- Racey, P.A. 1979. The prolonged storage and survival of spermatozoa in Chiroptera. Journal of Reproduction and Fertilization, **56**(1):391-402.
- Racey, P.A. and S.M. Swift. 1981. Variations in gestation length in a colony of pipistrelle bats (*Pipistrellus pipistrellus*) from year to year. Journal of Reproduction and Fertility, **61**(1):123-129.
- Racey, P.A. 1982. Ecology of bat reproduction. Chater 2: pp. 57-104 *in* Ecology of Bats, T.H. Kunz, editor. Springer, New York, 450pp.
- Raesly, R.L., and J.E. Gates. 1987. Winter habitat selection by north temperate cave bats. American Midland Naturalist, **118**(1):15-31.
- Randall, J. and H. G. Broders. 2014. Identification and characterization of swarming sites used by bats in Nova Scotia, Canada. Acta Chiropterologica, **16**:109-116.
- Ratajczak, Z., J. B. Nippert, J. C. Hartman, and T.W. Ocheltree. 2011. Positive feedbacks amplify rates of woody encroachment in mesic tallgrass prairie. Ecosphere 2(11):1-14.
- Ratcliffe, J.M. and J.W. Dawson. 2003. Behavioral flexibility: the little brown bat, *Myotis lucifugus*, and the northern long-eared bat, *M. septentrionalis*, both glean and hawk prey. Animal Behaviour, **66**:847-856.
- Razgour, O., J. Juste, C. Ibanez, A. Kiefer, H. Rebelo, S. J. Puechmaille, R. Arlettaz, T. Burke, D. A. Dawson, M. Beaumont and G. Jones. 2013. The shaping of genetic variation in edge-of-range populations under past and future climate change. Ecology Letters, **16**:1258–1266.

- Reeder, D.M., C.L. Frank, G.G. Turner, C.U. Meteyer, A. Kurta, E.R. Britzke, M.E. Vodzak, S.R. Darling, C.W. Stihler, A.C. Hicks, R. Jacob, L.E. Grieneisen, S.A. Brownlee, L.K. Muller, and D.S. Blehert. 2012. Frequent arousal from hibernation linked to severity of infection and mortality in bats with white-nose syndrome. PLoS ONE, **7**(6):1-10.
- Reichard, J.D. and T.H. Kunz. 2009. White-nose syndrome inflicts lasting injuries to the wings of little brown myotis (*Myotis lucifugus*). Acta Chiropterologica, **11**(2):457-464.
- Reynolds, H.T, T. Ingersoll, and H.A. Barton. 2015. Modeling the Environmental Growth of *Pseudogymnoascus destructans* and its Impact on the White-Nose Syndrome Epidemic. Journal of Wildlife Diseases, **51**(2):unpaginated.
- Richter, A.R., S.R. Humphrey, J.B. Cope, V. Brack. 1993. Modified cave entrances: thermal effect on body mass and resulting decline of endangered Indiana bats (*Myotis sodalis*). Conservation Biology, **7**(2):407-415.
- Robbins, L.W. and J.D. Parris. 2013. Preliminary acoustic and netting report for the southern portion of Camp Crowder National Guard Training Site in Newton County, Missouri. Report for the Missouri Army National Guard.
- Robbins, L.W., B.A. Smith, C.L. Gerdes. 2014. Mist net survey for bats with an emphasis on northern long-eared bats at Camp Crowder. Report for the Missouri Army National Guard. Rodenhouse, N.L., L.M. Christenson, D. Parry, and L. E. Green. 2009. Climate change effects on native fauna of northeastern forests. Canadian Journal of Forestry Research, 39:249-263.
- Rollins, K.E., D.K. Meyerholz, G.D. Johnson, A.P. Capparella and S.S. Loew. 2012. A Forensic Investigation into the Etiology of Bat Mortality at a Wind Farm: Barotrauma or Traumatic Injury? Veterinary Pathology, **49**:362-371.
- Rupprecht, C.E., K. Stohr, and C. Meredith. 2001. Rabies. Chapter 1: pp. 3-36 *in* Infectious Diseases of Wild Mammals, E.S. Williams and I. K. Barker, editors. The Iowa State University Press, Ames, Iowa, 560pp.
- Sasse, D.B., and P.J. Pekins. 1996. Summer roosting ecology of northern long-eared bats (*Myotis septentrionalis*) in the white mountain national forest. Bats and Forests Symposium October 1995, Victoria, British Columbia, Canada, pp.91-101.
- Saugey, D. A., V. R. McDaniel, D. R. England, M. C. Rowe, L. R. Chandler-Mozisek, and B. G. Cochran. 1993. Arkansas range extensions of the eastern small-footed bat (*Myotis leibii*) and northern long-eared bat (*Myotis septentrionalis*) and additional county records for the silver-haired bat (*Lasionycteris noctivagans*), hoary bat (*Lasiurus cinereus*), southeastern

- bat (*Myotis austroriparius*), and Rafinesque's big-eared bat (*Plecotus rafinesquii*). Proceedings of the Arkansas Academy of Science, **47**:102-106.
- Sayler, K.L. 2008. Land Cover Trends Project: Central Appalachians. U.S. Department of the Interior, U.S. Geological Survey, Washington, DC. Available at: <a href="http://landcovertrends.usgs.gov/east/eco69Report.html">http://landcovertrends.usgs.gov/east/eco69Report.html</a> Accessed: 8/27/2012.
- Schmidt, C.J., Taggart, T.W., and Choate, J.R. 2015. Kansas Mammal Atlas: An Online Reference. Available at: <a href="http://webcat.fhsu.edu/ksfauna/mammal">http://webcat.fhsu.edu/ksfauna/mammal</a>. Sternberg Museum of Natural History, Fort Hays State University, Hays, Kansas. Accessed: 03/03/2015.
- Schultes, K.L. 2002. Characteristics of Roost Trees Used By Indiana Bats (*Myotis sodalis*) and Northern Bats (*M. septentrionalis*) on the Wayne National Forest, Ohio. Master's Thesis. Ball State University, Muncie, Indiana. 147pp.
- Sedgeley, J.A. 2001. Quality of cavity microclimate as a factor influencing selection of maternity roosts by a tree-dwelling bat, *Chalinolobus tuberculatus*, in New Zealand. Journal of Applied Ecology, **38**:425-438.
- Shaffer, M.L., B.A. Stein. 2000. Safeguarding our precious heritage. Chapter 11: pp. 301–321 *in* Precious Heritage: The Status of Biodiversity in the United States, B.A. Stein, L.S. Kutner, and J.S. Adams, editors. Oxford (UK): Oxford University Press, 399pp.
- Sheets, J.J. 2010. Impact of Forest Management Techniques on Bats with a Focus on the Endangered Indiana Myotis (*Myotis sodalis*). Master's Thesis. Indiana State University, Terre Haute, Indiana, 70pp.
- Sheets, J.J., J.O. Whitaker Jr., V. Brack Jr., and D.W. Sparks. 2013. Bats of the Hardwood Ecosystem Experiment Before Timber Harvest: Assessment and Prognosis. A report to the United States Forest Service, 191-202.
- Sheffield, S.R., J.H. Shaw, G.A. Heidt, and L.R. McClenaghan, 1992. Guidelines for the protection of bat roosts. Journal of Mammalogy, **73**(3):707-710.
- Sherwin et al. 2013, p. 178 Sherwin, H. A., W. I. Montgomery and M. G. Lundy. 2013. The impact and implications of climate change for bats. Mammal Review, **43**(3):171-182.
- Silvis, A., W.M. Ford, E.R. Britzke, N.R. Beane, and J.B. Johnson. 2012. Forest Succession and Maternity Day Roost Selection by *Myotis septentrionalis* in a Mesophytic Hardwood Forest. International Journal of Forestry Research, **2012**:1-8.

- Silvis, A., Ford, W. M., Britzke, E. R., & Johnson, J. B., 2014. Association, roost use and simulated disruption of Myotis septentrionalis maternity colonies. Behavioral processes, **103**:283-290.
- Silvis, A., Ford, W. M., & Britzke, E. R., 2015. Effects of Hierarchical Roost Removal on Northern Long-Eared Bat (Myotis septentrionalis) Maternity Colonies. PLoS ONE, **10**(1):1-17.
- Simmons, N.B. 2005. Order Chiroptera: Subfamily Myotinae. p. 516 *in* Mammal species of the world: a taxonomic and geographic reference, D.E. Wilson and D.M. Reeder, editors. The John Hopkins University Press, Baltimore, Maryland. 2000pp.
- Smallwood, K.S. 2013. Comparing Bird and Bat Fatality-Rate Estimates Among North American Wind-Energy Projects. Wildlife Society Bulletin, **37**(1):19–33.
- Smith, B.D., M.K. Foley, and T.J. Catton. 2014. Summary of acoustic and emergence surveys for bats in the NorthMet project area. Technical Report.
- Society of American Foresters (SAF) (a), The Dictionary of Forestry, forest management. © 2008 Society of American Foresters, Available at: <a href="http://dictionaryofforestry.org/dict/term/forest\_management">http://dictionaryofforestry.org/dict/term/forest\_management</a>.
- Society of American Foresters (SAF) (b), The Dictionary of Forestry, silviculture. © 2008 Society of American Foresters, Available at:

  http://dictionaryofforestry.org/dict/term/silviculture.
- Spanjer, G. R., and M. B. Fenton. 2005. Behavioral responses of bats to gates at caves and mines. Wildlife Society Bulletin, **33**:1101–1112.
- Sparks, D.W., and J.R. Choate. 1995. New distributional records for mammals in Kansas. The Prairie Naturalist, **27**(3):185-192.
- Sparks, D.W., M.T. Simmons, C.L. Gummer, and J.E. Duchamp. 2003. Disturbance of Roosting Bats by Woodpeckers and Raccoons. Northeastern Naturalist **10**(1):105-108.
- Sparks, J.K., B.J. Foster, and D.W. Sparks. 2004. Utility pole used as a roost by a northern myotis, *Myotis septentrionalis*. Bat Research News, **45**:94.
- Speakman, J.R., Webb, P.I, and P.A. Racey. 1991. Effects of disturbance on the energy expenditure of hibernating bats. Journal of Applied Ecology, **28**(3):1087-1104.

- Species at Risk Public Registry. 2014. Available at: http://www.registrelep-sararegistry.gc.ca/species/default\_e.cfm. Accessed: 03/02/2015.
- Stevenson, L.K. 1986. Some ecological aspects of *Myotis keenii* in Oklahoma. Master's Thesis. Pittsburg State University, Pittsburg, Kansas. 61pp.
- Stones, R.C., and W. Fritz. 1969. Bat studies in upper Michigan's copper mining district. The Michigan Academician, 77-85.
- Stones, R.C., and L.P. Branick. 1969. Use of hearing in homing by two species of Myotis bats. Journal of Mammalogy, **50**(1):157-160.
- Swanson, G., and C. Evans. 1936. The hibernation of certain bats in southern Minnesota. Journal of Mammalogy, **17**(1):39-43.
- Swier, V. J. 2003 Distribution, roost site selection and food habits of bats in eastern South Dakota. Master's Thesis. Biology and Microbiology Department, South Dakota State University.
- Swier, V.J. 2006. Recent distribution and life history information for bats of eastern South Dakota. Occasional Papers, Museum of Texas Tech University, number 264, 23pp.
- Thogmartin, W.E., C.A. Sanders-Reed, J.A. Szymanski, P.C. McKann, L. Pruitt, R.A. King, M.C. Runge, and RE. Russell. 2013. White-nose syndrome is likely to extirpate the endangered Indiana bat over large parts of its range. Biological Conservation, **160**:162-172.
- Thomas, D.W. and F. Geiser. 1997. Periodic arousals in hibernating mammals: is evaporative water loss involved? Functional Ecology, **11**:585-591.
- Thomas, D.W., M. Dorais, and J.M. Bergeron. 1990. Winter energy budgets and cost of arousals for hibernating little brown bats, *Myotis lucifugus*. Journal of Mammalogy, **71**(3):475-479.
- Thomas, D.W. 1995. Hibernating bats are sensitive to nontactile human disturbance. Journal of Mammalogy, **76**(3):940-946.
- Tichenell, M.A., R.A. Williams, and S.D. Gehrt. 2011. Bat response to shelterwood harvests and forest structure in oak-hickory forests. Forest Ecology and Management, **262**:980-988.
- Tigner, J., and W.C. Aney. 1994. Report of Black Hills bat survey October 1993-October 1994. Nemo/Spearfish Ranger District, Black Hills National Forest. 19 pp.

- Tigner. J. and E.D Stukel. 2003. Bats of the Black Hills: a description of status and conservation needs. South Dakota Department of Game, Fish and Parks. 94pp.
- Tigner, J. 2004. Bat Surveys 2004 Buffalo Gap National Grasslands. Report to South Dakota Department of Game, Fish, and Parks & Buffalo Gap National Grasslands. 70pp.
- Tigner, J. 2005. Buffalo Gap National Grasslands Bat Surveys 2005. Report to South Dakota Department of Game, Fish, and Parks. 36pp.
- Timpone, J.C., J.G. Boyles, K.L. Murray, D.P. Aubrey, and L.W. Robbins. 2010. Overlap in roosting habits of Indiana Bats (*Myotis sodalis*) and northern bats (*Myotis septentrionalis*). American Midland Naturalist, **163**:115-123.
- Towne, G. and C. Owensby. 1977. Long-term Effects of Annual Burning at Different Dates in Ungrazed Kansas Tallgrass Prairie. Journal of Range Management, **37**(5):392-397.
- Turmelle, A.S., F.R. Jackson, D. Green, G.F. McCracken and C E. Rupprecht. 2010. Host immunity to repeated rabies virus infection in big brown bats. Journal of General Virology, **91**:2360-2366.
- Turner, G.G., D.M. Reeder, and J.T.H. Coleman. 2011. A five-year assessment of mortality and geographic spread of white-nose syndrome in North American bats and a look to the future. Bat Research News, **52**(2):13-27.
- Tuttle, M.D. 1979. Status, causes of decline, and management of endangered gray bats. Journal of Wildlife Management, **43**(1):1-17.
- Tuttle, M.D. and D.A.R. Taylor. 1998. Bats and Mines. Resource publication number 3. Bat Conservation International, Inc., Austin, Texas.
- U.S. Environmental Protection Agency . 2013. Recognition and Management of Pesticide Poisonings. USEPA Office of Pesticides Program. Publication # 73513001.
- U.S. Department of Energy. 2008. 20% Wind energy by 2030: increasing wind energy's contribution to U.S. electricity supply. U.S. Department of Energy, Office of Scientific and Technical Information, Oak Ridge, Tennessee. Available at: <a href="http://www.nrel.gov/docs/fy08osti/41869.pdf">http://www.nrel.gov/docs/fy08osti/41869.pdf</a>, Accessed 02/01/2015.
- U.S. Dept. of Energy, 2015. Department of Energy Efficiency and Renewable Energy. Available at: <a href="http://energy.gov/eere/success-stories/articles/mapping-frontier-new-wind-power-potential">http://energy.gov/eere/success-stories/articles/mapping-frontier-new-wind-power-potential</a>, Accessed: 03/02/2015.

- U.S. Department of Agriculture, Forest Service (USFS). 1991. Forest Service Manual (FSM) 2672.1. Available at: <a href="http://www.fs.fed.us/im/directives/fsm/2600/2672-2672.24a.txt">http://www.fs.fed.us/im/directives/fsm/2600/2672-2672.24a.txt</a> Accessed: 03/02/2015.
- U.S. Department of Agriculture, Forest Service (USFS). 1998. Silvicultural Approaches For Managing Ice-Damaged Stands. Information Sheet #4, Forest Service, Durham, New Hampshire, 2pp.
- U.S. Department of Agriculture, Forest Service (USFS). 2012. 2010 Resources Planning Act Assessment. Gen. Tech. Rep. WO-87. Washington, D.C., 198pp.
- U.S. Department of Agriculture, Forest Service (USFS). 2013. Adaptive Management Strategy for White-nose Syndrome, Available at: <a href="http://www.fs.usda.gov/detail/r2/home/?cid=stelprdb5319926">http://www.fs.usda.gov/detail/r2/home/?cid=stelprdb5319926</a> Accessed 03/02/2015
- U.S. Department of Agriculture, Forest Service (USFS). 2014. U.S. Forest Resource Facts and Historical Trends. Forest Service, FS-1035, 64pp.
- U.S. Fish and Wildlife Service (Service). 2007. Indiana Bat (*Myotis sodalis*) Draft Recovery Plan: First Revision. U.S. Fish and Wildlife Service, Fort Snelling, Minnesota, 258 pp.
- U.S. Fish and Wildlife Service (Service). 2009. U.S. Fish and Wildlife Service recommends suspending activities in caves to protect bats from white-nose syndrome. FWS Cave Advisory, 4pp.
- U.S. Fish and Wildlife Service (Service). 2011. A National Plan for Assisting States, Federal Agencies, and Tribes Managing White-Nose Syndrome in Bats. 21pp. Available at: <a href="https://www.whitenosesyndrome.org/sites/default/files/white-nose syndrome national plan may 2011.pdf">https://www.whitenosesyndrome.org/sites/default/files/white-nose syndrome national plan may 2011.pdf</a>, Accessed: 03/02/2015.
- U.S. Fish and Wildlife Service (Service). 2012. North American bat death toll exceeds 5.5 million from white-nose syndrome. News Release, January 17, 2012, Arlington, Virginia.
- U.S. Geological Survey (USGS), 2014. National Wildlife Health Center, Wildlife Health Bulletin 2014-04, Available at:

  <a href="http://www.nwhc.usgs.gov/publications/wildlife\_health\_bulletins/WHB\_2014-04\_WNS\_Updates.pdf">http://www.nwhc.usgs.gov/publications/wildlife\_health\_bulletins/WHB\_2014-04\_WNS\_Updates.pdf</a> Accessed: 03/02/2015.
- van Beelen, P. 2000. The risk evaluation of difficult substances in USES 2.0 and EUSES. RIVM Report 679102050, 35pp.

- van Zyll de Jong, C.G. 1979. Distribution and systematic relationships of long-eared Myotis in western Canada. Canadian Journal of Zoology, **57**:987-994.
- van Zyll de Jong, C.G. 1985. Handbook of Canadian mammals. National Museums of Canada, Ottawa, Canada. 212pp.
- Verant M.L., J.G. Boyles, W. Waldrep, G. Wibbelt, and D.S. Blehert. 2012. Temperature-dependent growth of *Geomyces destructans*, the fungus that causes but white-nose syndrome. PLoS ONE, **7**(9):1-7.
- Warnecke, L., J.M. Turnera, T.K. Bollinger, J.M. Lorch, V. Misrae, P.M. Cryan, G. Wibbelt, D.S. Blehert, and C.K.R. Willis. 2012. Inoculation of bats with European *Geomyces destructans* supports the novel pathogen hypothesis for the origin of white-nose syndrome. Proceedings of the National Academy of Sciences of the United States, **109**(18):6999-7003.
- Western Bat Working Group. 2010. Western Bat Working Group White-nose Syndrome Action Plan. Western Bat Working Group WNS Resources, 11pp.
- Wibbelt, G., A. Kurth, D. Hellmann, M. Weishaar, A. Barlow, M. Veith, J. Prüger, T. Görföl, L. Grosche, F. Bontadina, U. Zöphel, H.P. Seidl, P.M. Cryan, and D.S. Blehert. 2010. White-nose syndrome fungus (*Geomyces destructans*) in bats, Europe. Emerging Infectious Diseases, **16**(8):1237-1242.
- Willis, C.K.R., A.K. Menzies, J.G. Boyles, and M.S.Wojciechowski. 2011. Evaporative Water Loss Is a Plausible Explanation for Mortality of Bats from White-Nose Syndrome, **51**(3):364-373.
- Whitaker, J.O. and S.L. Gummer. 1992. Hibernation of the Big Brown Bat, *Eptesicus fuscus*, in buildings. Journal of Mammalogy, **73**(2):312-316.
- Whitaker, J.O., and L.J. Rissler. 1992a. Seasonal activity of bats at copperhead cave. Proceedings of the Indiana Academy of Science, **101**:127-134.
- Whitaker, J.O., Jr. and L.J. Rissler. 1992b. Winter activity of bats at a mine entrance in Vermillion County. Indiana. American Midland Naturalist, **127**:52-59.
- Whitaker, J.O., and W.J. Hamilton. 1998. Order Chiroptera: Bats. Chapter 3: pp.89-102 *in*Mammals of the eastern United States, Third Edition, Comstock Publishing Associates, a
  Division of Cornell University Press, Ithaca, New York, 608pp.

- Whitaker, J.O., and R.E. Mumford. 2009. Northern Myotis. pp. 207-214. In Mammals of Indiana. Indiana University Press, Bloomington, Indiana. 688pp.
- White, J.A., P.W. Freeman, and C.A. Lemen. 2012. Survey for the Indiana Bat (*Myotis sodalis*) in Southeastern Nebraska. 2012 Summary Report submitted to United States Fish and Wildlife Service, 6pp.
- White-Nose Syndrome Science Strategy Report. 2008. Questions, observations, hypotheses, predictions, and research needs for addressing effects of white-nose syndrome (WNS) in hibernating bats. Available at: <a href="http://batcon.org/pdfs/WNSMtgRptFinal2.pdf">http://batcon.org/pdfs/WNSMtgRptFinal2.pdf</a> Accessed: 03/02/2015.
- Yates, D., and D.C. Evers. 2006. Assessment of bats for mercury contamination on the North Fork of the Holston River, VA- 2005. Report BRI 2006-9. BioDiversity Research Institute, Gorham, Maine.
- Yates, D. E., E. M. Adams, S. E. Angelo, D. C. Evers, J. Schmerfeld, M. S. Moore, T. H. Kunz, T. Divoll, S. T. Edmonds, C. Perkins, R. Taylor and N. J. O'Driscoll. 2014. Mercury in bats from the northeastern United States. Ecotoxicology, **23**:45–55.
- Yates, M.D., and R.M. Muzika. 2006. Effect of forest structure and fragmentation on site occupancy of bat species in Missouri Ozark Forests. The Journal of Wildlife Management, **70**(5):1238-1248.
- Yuill, T.M., and C. Seymour. 2001. Arbovirus infections. Chapter 4: pp. 98–118 *in* Infectious Diseases of Wild Mammals, Third Edition, E.S. Williams and I.K. Barker, editors. Iowa State University Press, Ames, Iowa, 558pp.
- Zukal J., H. Bandouchova, T. Bartonicka, H. Berkova, V. Brack, J. Brichta, M. Dolinay, K. Jaron, V. Kovacova, M. Kovarik, N. Martínková, K. Ondracek, Z. Rehak, G. G. Turner, and J. Pikula. 2014. White-Nose Syndrome Fungus: A Generalist Pathogen of Hibernating Bats. PLoS ONE 9(5):1-10.

## Documented Correspondence, Personal Communications, and Unpublished Data

- Amelon, S. 2014. Email correspondence sent by S. Amelon, Biologist, U.S. Forest Service to S. Marquardt, Fish and Wildlife Biologist, Columbia, Missouri Field Office (sent 12/04/2014).
- Baker 2011. Written correspondence in response to Federal Register (76 FR 38095) 90-day Finding request for information (dated 10/27/2011).
- Ballmann, A. 2013. E-mail correspondence sent from A. Ballmann, Wildlife Disease Specialist, USGS-National Wildlife Health Center to J. Utrup, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service Green Bay Wisconsin Field Office (sent 05/17/2013).
- Bernard, R. 2014. Information presented by R. Bernard (University of Tennessee) at 2014 White-nose syndrome Workshop, St. Louis, Missouri. September 8-12, 2014.
- Bernard, R. 2014. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 07/17/2014).
- Bitting, C. 2015. Email correspondence sent by C. Bitting, Natural Resource Program Manager, U.S. National Park Service to E. Knoll, Endangered Species Biologist, Fish and Wildlife Service, Conway, Arkansas Field Office (sent 02/17/2015).
- Boggess, E., N. Wiley, P. Church, G. Geissler. 2014. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 11/05/2014).
- Bohrman, J.A 2015. Comments from internal (Service) review of Northern Long-eared Bat Final Listing Rule (received 03/02/2015).
- Boyer, A. 2012. Phone Conversation between A. Boyer, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service Columbus, Ohio Field Office and J. Utrup, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service Green Bay Wisconsin Field Office (dated 05/08/2012).
- Brown, C. 2012. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species (dated 11/10/2011).

- Brunkhurst, E. 2012. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species (dated 01/24/2012).
- Bunch, M. 2011. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species (sent 05/13/2011).
- Carter, T. 2012. Phone Conversation between T. Carter, Assistant Professor, Ball State University, and J. Utrup, U.S. Fish and Wildlife Service Green Bay Field Office (dated 01/12/2012).
- Coleman, J. 2013. Phone Conversation between J. Coleman, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service and J. Utrup, U.S. Fish and Wildlife Service Green Bay Field Office (dated 06/06/2013).
- Darling, S. and A. Hicks. 2012. Information presented by S. Darling (Vermont Fish and Wildlife Department) and A. Hicks (Vesper Environmental, LLC) at 2012 White-nose syndrome Workshop, Madison, Wisconsin. June 4-7, 2012.
- Delaware Department of Fisheries and Wildlife. 2014. Unpublished data, Summary of Northern Long-eared Bat (*Myotis septentrionalis*) Records in Delaware. (dated April, 2014).
- DePue, J. 2012. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species (sent 12/15/2011).
- Dickson, J. 2011. Written Correspondence in response to Federal Register (76 FR 38095) 90-day Finding request for information. (dated 08/29/2011).
- Divoll, T.J., Evers, D.C., Connery, B., Wheeler, B. *In prep*. Temporal monitoring of mercury in Vespertillionid bat hair from Mount Desert Island, Maine. Ecotoxicology.
- Dobony, C.A. 2011. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species (sent 11/07/2011).
- Elliott, A. 2015.Email correspondence sent by A. Elliott, Biologist, Missouri Department of Conservation to S. Marquardt, Fish and Wildlife Biologist, Columbia, Missouri Field Office (sent 02/03/2015).
- Feller, D. 2011. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species (sent 07/26/2011).

- Flock 2014. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding most recent northern long-eared bat State survey data (received 07/15/2014).
- Florida Fish and Wildlife Conservation Commission. 2013. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 12/20/2013).
- Foster, J. Information presented by J. Foster (University of New Hampshire) at 2012 White-nose syndrome Workshop, Madison, Wisconsin. June 4-7, 2012.
- French, T. 2012. Phone Conversation between T. French, Wildlife Biologist, Massachusetts Division of Wildlife and Fisheries and J. Utrup, U.S. Fish and Wildlife Service Green Bay Field Office (dated 01/03/2012).
- Frick, W. and M. Kilpatrick. 2013. June 17, 2013 Phone Conversation between W. Frick, M. Kilpatrick, researchers at University of California-Santa Cruz and J. Utrup, U.S. Fish and Wildlife Service Green Bay Field Office (dated 06/06/2013).
- Georgia Department of Natural Resources (GA DNR). 2014. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 01/02/2015).
- Geluso, K. 2011. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species (received 12/31/2011).
- Graham, Mark 2011. Unpublished 2002-2011 *Myotis leibii* data from National Park Service (received: 04/19/2011).
- Harris, M. 2014. Email correspondence sent by M. York-Harris, Wildlife Biologist, Mark Twain National Forest to S. Marquardt, Fish and Wildlife Biologist, Columbia, Missouri Field Office (sent 12/04/2014 and 12/18/2014).
- Hemberger, T. 2012. Email correspondence sent by T. Hemberger, Endangered Species Biologist, Kentucky Department of Fish and Wildlife Resources to J. Utrup, Fish and Wildlife Biologist, Green Bay, Wisconsin Field Office (sent 01/30/2012).
- Hemberger, T. 2015. Email correspondence sent by T. Hemberger, Endangered Species Biologist, Kentucky Department of Fish and Wildlife Resources to J. Garland, Fish and Wildlife Biologist, Frankfort, Kentucky Ecological Services Field Office (sent 02/03/2015).

- Herzog, C. 2012. Unpublished data including mist-net surveys conducted pre- and post- white-nose syndrome in New York (2003-2011)(dated 02/06/2012).
- Herzog, C. 2015. Presentation given by Carl Herzog (New York State Department of Conservation) at the New England Bat Working Group 2015 Annual Meeting. 01/21/2015.
- Hoving, C. 2011. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species (received 02/15/2011).
- Howell 2011. Email correspondence sent by D. Howell, Wildlife Biologist, Iowa Department of Natural Resources to J. Utrup, Fish and Wildlife Biologist, Green Bay, Wisconsin Field Office (sent 12/08/2011).
- Indiana State University. 2015. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 03/17/2015).
- Johnson, C. 2014. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 08/29/2014). Unpaginated.
- Kath, J. 2012. Phone Conversation between J. Kath, Endangered Species Manager, Illinois Department of Natural Resources and J. Utrup, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service Green Bay, Wisconsin Field Office (dated 01/12/2012).
- Kath, J. 2013. Email Communication sent by J. Kath, Endangered Species Manager, Illinois Department of Natural Resources to J. Utrup, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service Green Bay, Wisconsin Field Office (dated 04/09/2013).
- Kentucky Department of Fish & Wildlife Resources (KDFWR). 2013. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 12/30/2013).
- Kentucky DFWR 2014. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding most recent northern long-eared bat State survey data (received 10/27/2014).
- Kentucky DFWR 2014. Unpublished report. White-nose syndrome summary for Kentucky, (dated 04/30/2014).
- King, A. 2013. Email correspondence sent by A. King, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service Bloomington, Indiana Field Office to J. Utrup, Fish and Wildlife

- Biologist, U.S. Fish and Wildlife Service Green Bay, Wisconsin Field Office (sent 07/18/2013).
- Kitchell, M.E. and L.A. Wight. 2011. Poster: Community Ecology of Bats on the Maternity Range: A Comparison Pre- and Post- White-Nose Syndrome. United States Fish and Wildlife Service. Wallkill River National Wildlife Refuge, Sussex, NJ, 07461.(received 03/03/2015)
- Kurta, A. 2013. Email correspondence sent by A. Kurta, Professor, Eastern Michigan University, to J. Utrup, Fish and Wildlife Biologist, Green Bay, Wisconsin Field Office (sent 06/12/2013).
- Kurta, A. 2013. Peer review of the 12-month Find on the Eastern Small-footed Bat and Northern Long-eared Bat. (dated 11/12/2013).
- Kurta, A. 2014. This citation was added to the listing rule in error. The correct citation is Kurta 2013, in litt.
- Lacki, M.J. 2013. Peer review of the Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 10/29/2013).
- Lamb, J.W. 2014. Email correspondence sent by J.W. Lamb, Conservation Biologist, Arnold Air Force Base, Tennessee to M. Armstrong, Fish and Wildlife Biologist, Frankfort, Kentucky Ecological Services Field Office (sent 09/04/2014).
- Last, L. 2013. Email correspondence sent by L. Last, White-nose syndrome Surveillance Coordinator, Southeastern Cooperative Wildlife Diseases Study to J. Utrup, Fish and Wildlife Biologist, Green Bay, Wisconsin Field Office (sent 01/10/2013).
- Lausen, C. Unpublished data that includes summer survey data (2005-2006 and 2009) from the Dakota Prairie National Grassland and Custer National Forest (received 02/02/2012).
- Maher, S. 2014. Comment Letter on Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (received 09/03/2014).
- Maine Department of Inland Fisheries and Wildlife (MDIFW). 2013. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 12/09/2013).

- Maine Department of Inland Fisheries and Wildlife (MDIFW). 2015. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 03/16/2015).
- Markuson, J. 2011. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species (received 09/12/2011).
- Maryland Department of Natural Resources (MD DNR). 2014. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding most recent northern long-eared bat State survey data (received 08/21/2014).
- Massachusetts Division of Fisheries and Wildlife (MDFW). 2012. Unpublished data from U.S. Fish and Wildlife Service data request regarding most recent State survey data (received 10/08/2014).
- Meinke, C.W. 2015. Email correspondence sent by C.W. Meinke, Wildlife Biologist/Project Manager, Western Ecosystems Techology, Inc. to R. Amidon, Regional Wind HCP Coordinator, Bloomington, Region 3 Regional Office (sent 02/25/2015).
- Mengelkoch, J. 2014. Unpublished data from bat surveys in Illinois, 2010-2014 (received 12/19/2014)
- Merjent, Inc. 2014. Unpublished data from surveys for the northern long-eared bat conducted in Minnesota for proposed Enbridge pipeline project. (dated 10/15/2014).
- Missouri Department of Conservation. 2014. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 01/02/2014).
- Montana Fish, Wildlife, and Parks 2012. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species (dated 02/06/2012).
- Montana Fish, Wildlife, and Parks. 2015. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 03/17/2015).
- Montana Natural Heritage Program. 2015. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 03/17/2015).

- Morris, T. 2012. Unpublished data including Georgia cave database information from 2009-2011 and mist-net surveys conducted 2001-2007 (from Susan Loeb) in Chattahoochee National Forest, Georgia.
- New Hampshire Fish and Game Department (NHFG). 2013. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 12/31/2013).
  - Nordquist, G. 2012. Unpublished data from U.S. Fish and Wildlife Service data request regarding most recent northern long-eared bat State survey data (dated: 1/23/2012).
- North Carolina Department of Transportation (NC DOT). 2014. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 12/17/2014).
- North Carolina Wildlife Resources Commission 2014. Unpublished data from U.S. Fish and Wildlife Service data request regarding most recent northern long-eared bat State survey data (received 07/15/2014).
- Niederriter, H. 2012. Phone Conversation between H. Niederriter, Wildlife Biologist, Delaware Department of Natural Resources and Environmental Control and J. Utrup, U.S. Fish and Wildlife Service Green Bay Field Office (11/08/2011).
- Norris, J.L. 2014. A 2014 winter census of bats of the Lewisburg Limestone Mine, Preble County, Ohio. Report prepared for the Ohio Division of Wildlife. (received 09/25/2014).
- U.S. National Park Service (NPS). 2011. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species. (dated 08/19/2011).
- New York State Department of Environmental Conservation (NYSDEC) 2012. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species. (dated 02/062012).
- New York State Department of Environmental Conservation (NYSDEC). 2014. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (received 12/12/2013).
- Ohio Department of Natural Resources (ODNR) 2014, Unpublished data from U.S. Fish and Wildlife Service data request regarding most recent northern long-eared bat State survey data (received 09/12/2011).

- Peery, M.Z., T.R. Van Deelan, and B. Zuckerber. 2013. Unpublished data. Potential Impacts of White-nose Syndrome on Wisconsin's Cave Bats: A Spatial Modeling Approach. (dated 01/02/2014).
- Pelren, D. 2011. Email Correspondence sent from D. Pelren, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service Tennessee Field Office to C. Riley, Field Supervisor, U.S. Fish and Wildlife Service Pennsylvania Field Office. (sent 08/23/2011).
- Pennsylvania Game Commission (PGC) 2014. Unpublished data from U.S. Fish and Wildlife Service data request regarding most recent northern long-eared bat State survey data (received 09/29/2014)
- Pennsylvania Game Commission (PGC). 2014. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 08/18/2014).
- Pennsylvania Game Commission (PGC) 2014. Unpublished data. from U.S. Fish and Wildlife Service data request regarding most recent northern long-eared bat State survey data. (received 09/29/2014).
- Perry, R. 2014. Phone Conversation between R. Stark, Ozark Plateau National Wildlife Refuge and R. Perry, U.S. Forest Service, Southern Research Station (December 2104.).
- Plumb, G. and P. Budde 2011. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species (sent 03/30/2011).
- Powers, L. 2014. Email correspondence from L. Powers, University of Illinois at Urbana-Champaign to S. Marquardt, Fish and Wildlife Biologist, Columbia, Missouri Field Office (sent 12/19/2014).
- Puechmaille, S. 2012. Information presented by S. Puechmaille (University College Dublin) at 2012 White-nose syndrome Workshop, Madison, Wisconsin. June 4-7, 2012.
- Redell, D. 2011. Email correspondence sent by D. Redell, Bat Ecologist, Wisconsin Department of Natural Resources to J. Utrup, Fish and Wildlife Biologist, Green Bay, Wisconsin Field Office. (sent 11/29/2011).
- Reynolds, D.S. 2014. Peer review of the Proposed Listing of the Northern Long-Eared Bat (Myotis septentrionalis) as Endangered. (dated 01/01/2014).

- Reynolds, R. 2011. Email correspondence sent by R. Reynolds, Virginia Department of Game and Inland Fisheries to M. Turner, U.S. Fish and Wildlife Service Pennsylvania Field Office, State College, Pennsylvania. (dated 11/16/2011).
- Reynolds, R. 2012. Phone Conversation between R. Reynolds, Wildlife Biologist, Virginia Department of Game and Inland Fisheries and J. Utrup, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service Green Bay Field Office, (received 01/23/2012).
- Reynolds, R. 2012. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species (dated 01/23/2012).
- Reynolds, R. 2013. Information presented by R. Reynolds (Virginia Department of Game and Inland Fisheries) at 2014 White-nose syndrome Workshop, Boise, Idaho. September 3-6, 2013.
- Sasse, B. 2012. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species. (sent 10/12/2011).
- Sasse, B. 2014. Email correspondence from B. Sasse, Nongame Mammal/Furbearer Program Leader, Arkansas Game and Fish Commission to M. Armstrong, Fish and Wildlife Biologist, Frankfort, Kentucky Ecological Services Field Office. (sent 09/25/2014).
- Sharp 2014. Unpublished data from U.S. Fish and Wildlife Service data request regarding most recent northern long-eared bat State survey data. (received 07/11/2014).
- Shelton, K. 2014. Email correspondence from K. Shelton South Mississippi Conservation Program, Missouri Department of Wildlife, Fisheries, and Parks to M. Armstrong, Fish and Wildlife Biologist, Frankfort, Kentucky Ecological Services Field Office. (sent 09/26/2014).
- Smith, R. 2011. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding status of 7 cave bats species. (sent 04/04/2011).
- South Carolina Department of Natural Resources. 2015. Email correspondence from M. Wolf, U.S. Fish and Wildlife Service, Charleston, South Carolina Ecological Services Field Office to M. Armstrong, U.S. Fish and Wildlife Service, Frankfort, Kentucky Ecological Services Field Office transmitting information from the South Carolina Department of Natural Resources. (sent 03/022015).

- South Dakota Department of Game, Fish, and Parks (SDDGFP). 2014. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 12/16/2014).
- Stark, R. 2013. Email correspondence sent by R. Stark, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service Tulsa, Oklahoma Field Office to K. Tinsley, Fish and Wildlife Biologist, Region 3 Ecological Services (received 06/28/2013).
- Stihler, C. 2012. Email correspondence sent by C. Stihler, West Virginia Department of Natural Resources to M. Turner, U.S. Fish and Wildlife Service Pennsylvania Field Office, State College, Pennsylvania. (dated 01/10/2012).
- Stihler, C. 2012. Unpublished data that includes mist-net survey data (2006-2011) from West Virginia (received 01/24/2011).
- Turner, G. 2014. Unpublished data. from U.S. Fish and Wildlife Service data request regarding most recent northern long-eared bat State survey data. (received 09/29/2014).
- Turner, M. 1999. Personal observation while capturing bats in the Monongahela National Forest, West Virginia.
- Tennessee Wildlife Resource Agency (TWRA). 2014. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 01/02/2014).
- Tennessee Wildlife Resource Agency (TWRA). 2014. Unpublished data from U.S. Fish and Wildlife Service Region 3 data request regarding most recent northern long-eared bat State survey data (received 07/15/2014).
- U.S. Forest Service (USFS). 2006. Unpublished data including information on 2006 surveys in two Wyoming locations.(received 02/03/2015).
- U.S. Fish and Wildlife Service (Service).2011-2015. Compiled unpublished data.
- Virginia Department of Game and Inland Fisheries (VDGIF) 2014. Unpublished data from U.S. Fish and Wildlife Service data request regarding most recent northern long-eared bat State survey data (received 06/26/2014).

- Vermont Fish and Wildlife Department (VFWD). 2014. Unpublished data from U.S. Fish and Wildlife Service data request regarding most recent northern long-eared bat State survey data (received 07/18/2014).
- Vermont Fish and Wildlife Department (VFWD). 2014. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (received 12/03/2013).
- Weeks, K.C. and Graeter, G.J. 2014. Email correspondence sent by K. Weeks, Mountain Wildlife Diversity Supervisor, North Carolina Wildlife Resources Commission to M. Armstrong, Fish and Wildlife Biologist, Frankfort, Kentucky Ecological Services Field Office (sent 10/10/2014).
- Wisconsin Department of Natural Resources (WDNR). 2014. Unpublished data. Summary of recent summer survey data collected in Wisconsin presented to the Twin Cities Field office on 11/17/2014.
- Wisconsin Department of Natural Resources (WDNR). 2014. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 01/02/2014).
- WNS Workshop 2014. Information presented by T. Elliott, Missouri Department of Conservation at 2014 White-nose syndrome Workshop, St. Louis, Missouri. September 8-12, 2014.
- West Virginia Department of Natural Resources (WVDNR). 2014. Unpublished data from U.S. Fish and Wildlife Service data request regarding most recent northern long-eared bat State survey data. (received 07/14/2014).
- Western Area Power Administration. 2015. Comment letter on October 2013 Proposed Listing of the Northern Long-Eared Bat (*Myotis septentrionalis*) as Endangered. (dated 03/16/2015).
- Wyoming Game and Fish Department 2012. Unpublished data from U.S. Fish and Wildlife Service data request regarding most recent northern long-eared bat State survey data (received 01/11/2012).
- Zimmerman, C. 2014. Unpublished data. Email correspondence sent by C. Zimmerman, Student, University of Central Missouri to S. Marquardt, Fish and Wildlife Biologist, Columbia, Missouri Field Office. (sent 12/07/2014).